

05/16/2014

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Updates from the MT
Laboratory Services

Bureau

800-821-7284

www.lab.hhs.mt.gov



The Limitations of MALDI-TOF for ID of Select Agents

As the Montana Laboratory Response Network (LRN-B) Reference laboratory, we would like to pass along some information regarding the use of MALDI-TOF for identification of biothreat agents. If you are considering this technology, we would like to make you aware of the importance of rule-out testing and the procedures within the LRN-B, the limitations of the MALDI-TOF systems, and the requirements of the Select Agent Program.



1. Sentinel clinical laboratories are advised to only perform rule-out testing on suspect biothreat agents per the American Society for Microbiology's (ASM) [Sentinel Level Clinical Laboratory Protocols for Suspected Biological Threat Agents and Emerging Infectious Diseases](#).

This is also true for the CAP Laboratory Preparedness Exercise (LPX). Sentinel clinical laboratories should not be utilizing MALDI-TOF for the exercise. Remember, the point of the exercise is to determine if the organism can be ruled out or should be referred, not definitive identification of the organism.

2. MALDI-TOF systems and databases may lack thorough information to identify biothreat agents. Although additional databases may be purchased that more definitively identify select agents, CDC response officials only recognize methods utilized by an LRN reference laboratory for confirmation of biothreat agents. In addition, MT rules mandate that certain select agents (*B. anthracis*, *Brucella spp.*, and *Y. pestis*) be submitted for confirmation by MT PHL.

3. There is concern that MALDI-TOF may create aerosols, potentially putting laboratorians at risk of a laboratory-acquired infection, especially if the systems are not in a BSL-3 suite.

In collaboration with ASM, the Association of Public Health Laboratories (APHL) is conducting a safety study to determine the viability of biothreat agents at the time of matrix treatment and extraction prior to MALDI-TOF analysis. The results of this study will better help LRN-B Reference laboratories to educate sentinel clinical laboratories on these systems.

4. If a sentinel clinical laboratory suspects a biothreat agent, laboratory staff should immediately notify the MT PHL at (800) 821-7284. MT PHL can assist the sentinel clinical laboratory with select agent documentation and the transfer or destruction of specimens, isolates, and derivatives.

Select Agent Transfer and Disposal

Laboratories who have been notified of the confirmation of a select agent should consider the following:

If you do not have an autoclave on-site, you will need to chemically disinfect any remaining culture material before sending it for incineration. Time is limited regarding the destruction of select agents, and there are guidance documents available, such as the [MMWR report](#), section 3.5.3 *discarding a select agent*.

The National Select Agent Registry [website](#) contains a wealth of information regarding select agents, including a list of the agents and the regulations entities must follow regarding them. Forms for reporting ([APHIS/CDC Form 4](#)) and transfer ([APHIS/CDC Form 2](#)) are available on-line, and submitted to CDC directly.

Please call MTPHL for guidance concerning select agents, including documentation, destruction and disposal.



Montana Communicable Disease Weekly Update

Release date: 5/16/2014

DISEASE INFORMATION

Summary – MMWR Week 19 - Ending 5/10/2014 Preliminary disease reports received at DPHHS during the reporting period May 4–10, 2014 included the following:

- **Vaccine Preventable Diseases:** Influenza hospitalization (1), Pertussis (16), Varicella (2)
- **Invasive Diseases:** (0)
- **Enteric Diseases:** Campylobacteriosis (4), Cryptosporidiosis (1), Giardiasis (4), Salmonellosis (3), Shiga-toxin producing *E. coli* [STEC] (1), Shigellosis (1)
- **Hepatitis:** Hepatitis B, chronic (1)
- **HIV Disease**:** (0)
- **Vector-borne Diseases:** (0)
- **Animal Rabies:** (0)
- **Travel Related Conditions:** (0)

* Weekly updated Montana Influenza Summary is included as link in the Influenza section of this update.

** A case is included if a new confirmatory test or report was received by DPHHS. Cases include both persons who were newly diagnosed and persons newly reported in Montana who may have been diagnosed in another state or country.

NOTE: The attached reports have multiple pages reflecting the following information: (1) cases for the past reporting week; (2) communicable diseases YTD; (3) clusters and outbreaks; and (4) a quarterly HIV/STD summary.

HOT TOPICS

Recreational water illness and injury (RWII) prevention week May 19th – 25th: ***(Grade School Kids poster Contest!!!)***

RWII is coming up! Please check out our new website about our campaign:

www.dphhs.mt.gov/publichealth/rwii Everything you need to know about RWII and the contest is on our site or linked to that site. Links to the site have been sent to elementary schools in Montana, inviting them to participate in this year's contest! Press Release and web information will be distributed on Monday.

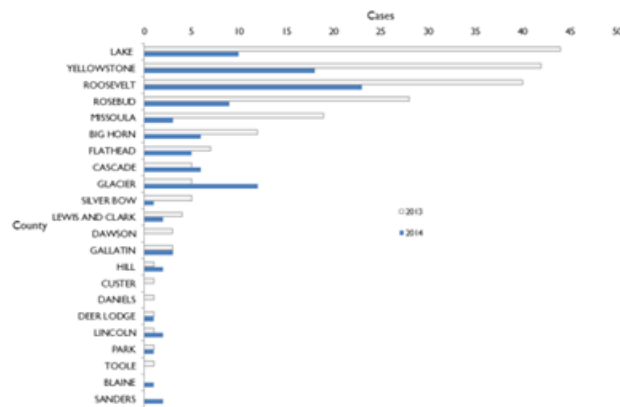
We are asking all elementary school children to learn about RWII in their class and color a poster to show what they learned. These posters will be entered into a contest and the best posters not only win a prize, but will be printed and distributed to pools throughout Montana as part of the second phase of the campaign in July. ***Talk to your schools and teachers about how they can participate during the last few weeks of school before they go out and visit water recreation facilities. We will be messaging on this issue later this summer also and use the winners poster in our messaging.***

Increase in gonorrhea cases (see attached report): There has been a significant increase in the number of reported gonorrhea cases since 2011 (85 cases; 8.5 cases per 100,000 population). After a slight increase in 2012 (108 cases), 224 cases (22.3 cases per 100,000 population) were reported in 2013. The increasing trend is likely to continue in 2014, with 107 cases reported through April 30. A few counties are largely driving the increase in cases (Figure 1). Immediate reporting of gonorrhea cases to public health and public health investigations leading to the timely identification, testing, and treatment of sexual contacts of gonorrhea cases are essential to limiting spread of gonorrhea in a community.

Please review and send to providers the attached report with additional details and recommendations for providers.

Additional gonorrhea messaging will be released in the coming weeks. Please contact the STD Prevention Section (406-444-3565) for more information or assistance on partner investigation and notification and treatment guidelines.

Figure 1. Gonorrhea cases by county — Montana, Jan 1, 2013–April 30, 2014



County cases include cases belonging to tribal jurisdictions that lie within a county's borders

Mold Website (NEW): Are you tired of fielding the mold calls for your health department? We have developed a new mold resources website that is designed to answer the most common questions asked and help direct people to resources. It is also designed to help you answer questions and provide you as public health staff answer questions. Get the web address out there and have it intercept calls so you don't have to answer them. <http://www.dphhs.mt.gov/publichealth/cdepi/mold.shtml>

Rabies Communications: It's that time of year again: Hantavirus, ticks (and they are out everywhere), and now Rabies. Both the animals and humans are coming out and running into one another so exposures are occurring and calls are coming in. Our press release this week received some coverage <http://www.dphhs.mt.gov/newsevents/newsreleases2014/may/rabies.shtml> and our resources are available for your use on our SharePoint site.

Key Points – Middle East Respiratory Syndrome Coronavirus (MERS-CoV): Please find attached the most recent May 16, "Key Points" document from CDC on MERS-CoV.

2013-2014 Influenza Season: (NEW FLU SUMMARY AVAILABLE): Don't stop reporting... Please continue to report your aggregate case counts in MIDIS through the end of the season (June 1) -- only a few weeks away. The current [FluView](#) report indicates that seasonal influenza activity is low and declining across most of the country, though flu viruses continue to circulate and cause illness in the United States. The most recent issue of the Montana Influenza Summary is available at: <http://www.dphhs.mt.gov/influenza/influenzaactivity.shtml>

Respiratory Syncytial Virus (RSV): A final report on RSV will be provided in the second week of June. The most recent report can be found at [MTRSV MMWR Week 19 2014](#)

INFORMATION/ANNOUNCEMENTS

Summer Institute Registration Page Now Open: The 2014 DPHHS Summer Institute is July 14 – 18 in Billings at the Crowne Plaza Hotel. The conference is intended for the professional public health workforce of Montana from tribal, county, and city public health agencies. Sanitarians, DPHHS employees, and college students studying public health, and interested clinicians might also attend for training and professional development. The sessions this year involve immunizations, epidemiology, public health emergency preparedness, food safety, public health law, and public health management. There are continuing education credits available for the sessions. For details on sessions, fees, and registration, visit <http://www.dphhs.mt.gov/publichealth/mphti/>.

CDEpi Disease Investigation Guidelines: CDEpi has completed another 2 investigation guidelines as part of our accreditation efforts. Investigation guidelines are designed to be step-wise in nature, and to assist you through any reportable disease investigation. Feel free to access them via SharePoint and tell us what you think! We are currently focusing on the Top 20 reported conditions in Montana. Stay tuned!

- [Cryptosporidiosis](#)
- [Tularemia](#)
- [Q-Fever](#)
- [Arboviral Diseases \(e.g. West Nile Virus\)](#)

OTHER TIMELY RESOURCES

Pertussis: <http://www.dphhs.mt.gov/publichealth/cdepi/index.shtml>

Hantavirus: <http://www.dphhs.mt.gov/publichealth/cdepi/index.shtml>

Ticks: <http://www.dphhs.mt.gov/publichealth/ticks/index.shtml>

24/7 AVAILABILITY

The Communicable Disease Epidemiology (CDEpi) Program is available 24 hours a day, 7 days a week, 365 days a year, to assist local health jurisdictions. Local providers should call, including after normal business hours, their local health jurisdiction. The CDEpi 24-hour line is available as a back-up to the local health jurisdiction's 24-hour line. If you need CDEpi assistance, please call 406.444.0273. Phone calls to this number outside of normal business hours will be answered by the answering service. The answering service will immediately forward the message to CDEpi, and we will respond as quickly as possible.

Local health jurisdictions, please ensure that your local providers have your 24/7/365 contact information. And please inform CDEpi or the Public Health Emergency Preparedness Program of updates to your required 24/7 contact information.

This update is produced by the Montana Communicable Disease Epidemiology Program. Questions regarding its content should be directed to 406.444.0273 (24/7/365). For more information: <http://cdepi.hhs.mt.gov>